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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,886	08/20/2003	Toshio Kayao	2003_1176A	4644

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EXAMINER

SCHINDLER, DAVID M

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

119

Office Action Summary	Application No. 10/643,886	Applicant(s) KAYAO, TOSHIO	
	Examiner David Schindler	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/03/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/03/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some * c) ☐ None of:
 - 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The new title "Magnetic Encoder With Cover Welded To Reinforcing Ring" is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichiman (2002/0140418) in view of Blard et al. (6,152,274).

Ichiman discloses a magnetic ring (10) circumferentially magnetized with alternate S poles and N poles (Page 2, Left Column, Paragraph [0014], Lines 9-13), a reinforcing ring (2) fixed to the magnetic ring (Page 2, Right Column, Top Paragraph, Lines 5-17), and a non-magnetic protective cover (6) covering the magnetic ring and attached to the reinforcing ring by bending a part of the cover over the reinforcing ring ((Page 4, Left Column, Paragraph [0034]) and (Page 4, Left Column, Paragraph [0038]) and (Page 2, Right Column, Paragraph [0016]) and (Figure 1 and Figure 8)).

Ichiman does not disclose a non-magnetic protective cover welded to the reinforcing ring.

Blard et al. discloses crimping, folding over, or welding as a fixing means for a cover (Column 5, Lines 37-40).

It would have been obvious at the time of the invention to modify Ichiman to include welding as a fixing means instead of bending a part of the cover over the reinforcing ring as taught by Blard et al. in order to permanently fix the protective cover to the reinforcing ring.

It is further noted that it would have been obvious to a person of ordinary skill in the art at the time of the invention to weld two pieces of metal together in order to create a permanent seal. This is especially true for adverse environments like an automotive environment where there is a lot of vibration.

4. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichiman (2002/0140418) in view of Blard et al. (6,152,274) and in further view of Ono et al. (Positioning system with laser for automatic micro spot laser welding).

As to Claim 9,

Ichiman in view of Blard et al. discloses as explained above.

Ichiman in view of Blard et al. does not disclose the non-magnetic protective cover is welded to the reinforcing ring via micro-spot welds produced by a laser.

Ono et al. discloses micro-spot welds produced by a laser (Abstract, Lines 1-3).

It would have been obvious at the time of the invention to modify Ichiman in view of Blard et al. to include micro-spot welds produced by a laser as taught by Ono et al. in order to utilize the high reliability and productivity of the YAG laser welding operation (Abstract, Lines 2-3).

As to Claims 10 and 11,

Ichiman in view of Blard et al. discloses as explained above.

Ichiman in view of Blard et al. does not disclose the micro-spot welds produced by a laser comprise micro-spot welds produced by a YAG laser.

Ono et al. discloses micro-spot welds produced by a YAG laser (Abstract, Lines 1-3).

It would have been obvious at the time of the invention to modify Ichiman in view of Blard et al. to include micro-spot welds produced by a laser as taught by Ono et al. in order to utilize the high reliability and productivity of the YAG laser welding operation (Abstract, Lines 2-3).

Allowable Subject Matter

5. Claims 5-8 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to Claims 5-8,

The reason for allowance is that while the prior art discloses the use of welding, it does not disclose welding locations. Therefore, the welding locations listed in Claim 5 make this claim allowable. Claims 6-8 depend on Claim 5.

As to Claims 12-14,

The reason for allowance is that while the prior art discloses the use of welding, it does not disclose welding locations. Therefore, the welding locations listed in Claim 12 make this claim allowable. Claims 13-14 depend on Claim 12.

Response to Arguments

6. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Schindler whose telephone number is (571) 272-2112. The examiner can normally be reached on M-F (8:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Schindler



JAY PATIDAR
PRIMARY EXAMINER